## ABSTRACT OF THE DISCLOSURE

A method and system of passively acquiring three-dimensional data concerning an object relies on comparison of changes in dimensions of the background object relative to changes in dimensions of a foreground pattern or patterns as the effective optical path length between the foreground patterns and a corresponding receiver or receivers is varied. The system and method of the invention may utilize a mirror having a pattern formed thereon that reflects a different set of wavelengths than the remaining surface of the mirror.